

Los Alamos National Laboratory
Environmental Restoration Program
Standard Operating Procedure

No: LANL-ER-SOP-06.17 Rev: 0

Trier Sampler for Sludges and Moist Powders or Granules

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TRIER SAMPLER FOR SLUDGES AND MOIST POWDERS OR GRANULES

1.0 PURPOSE

This procedure describes methods for using the Trier sampler for moist powders or granules.

2.0 SCOPE

2.1 Applicability

This procedure is applicable to all site workers using the Trier sampler for sampling sludges, moist powders, and granules for the Environmental Restoration program.

2.2 Training

The site workers should be familiar with the sampling equipment and must document that they have read and understand this procedure and the procedures in Section 1.0, General Instructions.

3.0 DEFINITIONS

N/A

4.0 BACKGROUND AND/OR CAUTIONS

Trier sampler is used for sampling moist or sticky solid waste materials in bags, drums, sacks, or similar containers. A diagram of the Trier Sampler is shown in Attachment A.

A Trier consists of a long tube with a slot that extends almost its entire length. The tip and edges of the tube slot are sharpened to allow the trier to cut a core of material to be sampled when rotated after insertion into the material. A Trier sampler is most useful when the waste is moist or sticky solids with a particle diameter less than one-half the diameter of the Trier.

Site workers preparing for field operations should read and understand the procedures outlined in LANL-ER-SOPs, Section 2.0, Health and Safety in the Field. In addition, site workers should refer to site-specific Operable Unit Health and Safety plans for the particular health and safety equipment to be used.

5.0 EQUIPMENT

Equipment to implement this procedure is shown in Attachment B.

6.0 PROCEDURE

- A. Coordinate sampling efforts with the Sample Coordination Facility.
- B. Assemble the necessary equipment.
- C. Decontaminate all equipment prior to and after each use per SOP-02.07, General Equipment Decontamination.
- D. After opening the waste container, insert the Trier sampler into the waste and cut a core of the waste by rotating the sampler.
- E. Transfer the sample from the Trier sampler to the sample container (SOP-01.02, Sample Containers and Preservation). A spoon or similar tool may be used to scrape the sample out of the Trier, if necessary.
- F. For containerized materials, reclose the container.

6.1 Documentation

- A. Complete the Containerized Waste Sampling Record (SOP-06.15). Any additional comments should be recorded on the Daily Activity Log, SOP-01.04, Sample Control and Field Documentation.
- B. Complete other applicable sample forms and labels also found in SOP-01.04.

6.2 Post Sampling Activities

- A. Ensure all equipment is accounted for, decontaminated, and ready for transport.
- B. Make sure all sampling locations are properly documented.
- C. Package all samples for transport to the laboratory, per SOP-01.03, Handling, Packaging, and Shipping of Samples.

7.0 REFERENCES

The following procedures are directly related to this procedure and should be reviewed before field operations:

LANL-ER-SOPs in Section 1.0, General Instructions.
LANL-ER-SOPs in Section 2.0, Health and Safety in the Field.
LANL-ER-SOP-06.15, Coliwasa Sampler for Liquids and Slurries.

EPA. November 1986. "Test Methods for Evaluating Solid Waste," Vol. II: Field Manual Physical/Chemical Methods, Office of Solid Waste and Emergency Response, Washington D.C.

8.0 RECORDS

- A. Completed Containerized Waste Sampling Form
- B. Completed Chain-of-Custody/Request for Analysis Form
- C. Completed Daily Activity Log, which will include any deviations and additional comments.

9.0 ATTACHMENT

- A. Equipment and Supplies Checklist for Trier Sampler
- B. Trier Sampler diagram

EQUIPMENT AND SUPPLIES CHECKLIST FOR TRIER SAMPLES

- _____ Trier
- _____ Wide-Mouth Jar
- _____ Funnel
- _____ Spoon
- _____ Pan
- _____ Containerized Waste Sampling Record
- _____ Daily Activity Logs
- _____ Chain-of-Custody/Request for Analysis form
- _____ Sample Collection Log
- _____ Variance Log
- _____ Custody Seals
- _____ Unique Sample Stickers
- _____ Sample Labels
- _____ Cooler
- _____ Tape

TRIER SAMPLER DIAGRAM

